

[First Hit](#) [Previous Doc](#) [Next Doc](#) [Go to Doc#](#)

☐ [Generate Collection](#) [Print](#)

L4: Entry 2 of 8

File: DWPI

Jan 2, 1997

DERWENT-ACC-NO: 1997-054172

DERWENT-WEEK: 199735

COPYRIGHT 2005 DERWENT INFORMATION LTD

TITLE: Fire retardant foam material for coatings, joints etc. - contg. stone-forming forming component and hardener component and=or gas-releasing component and=or pH-adjusting component

PRIORITY-DATA: 1996DE-1000977 (January 12, 1996)

[Search Selected](#)[Search ALL](#)[Clear](#)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> DE 29616052 U1	January 2, 1997		047	C04B038/10

INT-CL (IPC): [C04 B 38/10](#); [C09 K 21/02](#); [E04 B 1/94](#)

ABSTRACTED-PUB-NO: DE 29616052U

BASIC-ABSTRACT:

Pasty foam material or a multi-part compsn. of paste components (I) for the prodn. of inorganic, porous, solid foam prods., contg. a stone-forming component (A) together with hardener component(s) (B) and/or gas-releasing component(s) (C) and/or pH-modifying component(s) (D) and/or a combination thereof, in amts. sufficient to affect pore structure and/or strength. In addn. to the stone-former (A-1), component (A) may contain cpd(s). which release gas at pH 2-14 (A-2) and/or pH-adjusting cpd(s) (A-3). Component (A-1) comprises finely divided amorphous aluminosilicate contg. amorphous SiO₂ and Al₂O₃, vitreous amorphous electrostatic filter ash (EFA), EFA from brown coal-fired power stations, ground calcined bauxite, basalt powder, undissolved amorphous SiO₂, esp. amorphous, opt. anhydrous silicic acid in the form of dispersed powder or fumed silica from high-temp. processes, meta-kaolin, powdered quartz, Mg silicate (talcum, soapstone), mica, perlite, corundum, flue dust, kaolin, zeolite, alumina, nacrite, dickite, garnet, orthoclase, microcline, plagioclase, muscovite, rhyllite, Ca silicate, Ca aluminate, Ca ferrite, mixts. of CaO with SiO₂, Al₂O₃ and Fe₂O₃, cement, Portland cement (PC), iron PC, blast furnace slag cement, trass cement, Portland oil shale cement, blast furnace trass cement, flue dust cement, phonolite cement, vulcanite cement, sulphate slag cement, aluminous cement, expanding cement, deep well cement or fast setting cement. Component (A-2) comprises ammonium chloride, acetate, carbonate, phosphate or sulphate, Na₂O₂, H₂O₂, Na perborate, carbonate salts, alkali or alkaline earth carbonates, soda, potash, lime, spars, hydrogen carbonates, NaHCO₃, Al powder or Mg powder. Component (A-3) comprises water glass, aq. alkali silicate solns. contg. 1.2-2.5 moles SiO₂ per mole K₂O and/or Na₂O, aq. Al silicate solns. and free-flowing materials contg. 1.5-10 pts. wt. SiO₂/Al₂O₃ mixts. and 0.7-2.5 pts. wt. K₂O or 0.55-1.5 pts. wt. Na₂O to 1 pt. wt. dissolved SiO₂, acids such as HCl, H₂SO₄, HNO₃ and citric, acetic or phosphoric acid, or alkalis such as NaOH, KOH, Ba(OH)₂ and Ca(OH)₂. Hardener (B) comprises water or an alkali silicate soln.

or free-flowing material as in (A-3). The gas-releasing cpd. in (C) and the pH-adjusting cpd. in (D) are as defined above. Also claimed is a porous, solid inorganic foam prod. (II) from compsn. (I) having a density of 40-1000 kg/m³, a relative compressive strength of 0.2-60 N/mm² and a mean pore dia. of 0.1-10 mm.

USE - As a fireproof material for filling small holes, joints, defects etc. in walls, roofs and other structural situations, and for coating steel and wooden structures.

ADVANTAGE - A fireproof coating and filling material which is capable of rapid application and adaptation on site without expensive mixers and other equipment, in the absence of electric powder and with minimal waste and defects.

[Previous Doc](#)

[Next Doc](#)

[Go to Doc#](#)